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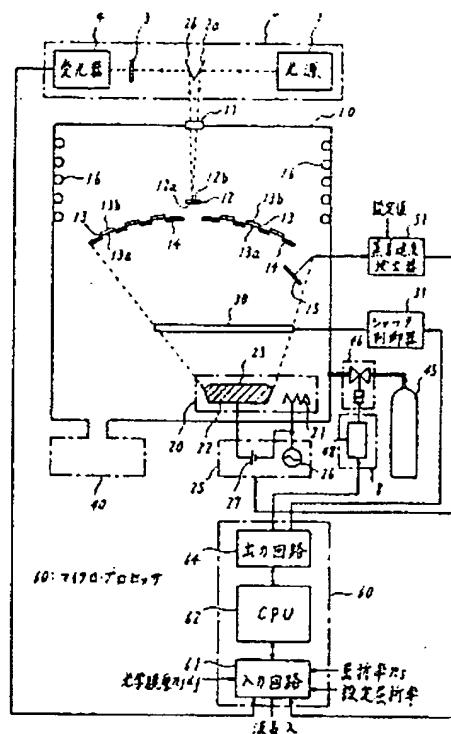
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APPLICANT : MITSUBISHI ELECTRIC CORP;

INVENTOR : TSUBOI SHUNGO;

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TITLE : VACUUM DEPOSITION DEVICE



ABSTRACT : PURPOSE: To deposit a thin film having a prescribed refractive index on a material for vapor deposition, by detecting reflectivity from a thin film deposited by evaporation on monitor glass and controlling the refractive index from the detected reflectivity.

CONSTITUTION: The thin films are respectively formed by vapor deposition on the respective surface of the material 13 for vapor deposition, monitor glass 12 and thick film sensor 15 in a chamber 10. The thickness of the thin film deposited by evaporation on the sensor 15 is detected by a detector 15 and a power supply 25 is controlled from the difference between the vapor deposition speed thereof and a set value. The detected thickness is also inputted to a microprocessor 60. A light beam from a light source 11 is then entered to the glass 12 and is made into monochromatic light of a prescribed wavelength by an interference filter 3. Said light is converted by a photodetector 4 to an electric signal which is outputted to an input circuit 61 of the microprocessor 60. The circuit 61 computes the reflectivity in accordance with the input signal, calculates the refractive index from the same and the vapor deposition speed and decides the equality, nonequality, etc., to the set refractive index. A gaseous pressure control means 8 and shutter controller 31 are thereby controlled via an output circuit 64.

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